

03050203-040
(North Fork Edisto River)

General Description

Watershed 03050203-040 is located in Lexington, Aiken, and Orangeburg Counties and consists primarily of the *North Fork Edisto River* and its tributaries from Black Creek to Bull Swamp Creek. The watershed occupies 115,363 acres of the Sandhills and Upper Coastal Plain regions of South Carolina. The predominant soil types consist of an association of the Fuquay-Dothan-Vaocluse-Lakeland-Troup series. The erodibility of the soil (K) averages 0.13; the slope of the terrain averages 5%, with a range of 0-25%. Land use/land cover in the watershed includes: 2.05% urban land, 25.22% agricultural land, 12.64% scrub/shrub land, 0.51% barren land, 48.86% forested land, 10.29% forested wetland (swamp), 0.01% nonforested wetland (marsh), and 0.42% water.

This section of the North Fork Edisto River accepts drainage from Cedar Creek (Lynch Branch, Rast Pond, Fort Pond, Thrasher Branch, Crawford Branch), Jackson Branch, Hollow Creek (Ritter Branch, Little Hollow Creek), Pond Branch (Hunter Branch), Salem Creek, Penn Branch, and Big Beaver Creek (Little Beaver Creek). Further downstream, Turkey Branch (Gibson Branch, Hutto Mill Pond) enters the river. There are numerous ponds and a total of 110.8 stream miles in this watershed, all classified FW. As a reach of the North Fork Edisto River, this watershed accepts the drainage of all streams entering the river upstream of the watershed.

Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
E-092	P	FW	NORTH FORK EDISTO RIVER AT SC 3, 5.5 MI NW OF NORTH
E-104	W	FW	NORTH FORK EDISTO RIVER AT S-38-73

North Fork Edisto River - There are two SCDHEC monitoring sites along this section of the North Fork Edisto River, which was Class B until April, 1992. At the upstream site (E-092), aquatic life uses are not supported due to occurrences of copper and zinc in excess of the aquatic life acute standards, including high and very high concentrations of zinc measured in 1994 and 1995. In addition, there are significant increasing trends in pH and turbidity. This is a blackwater system, characterized by naturally low pH and dissolved oxygen concentrations. Although pH excursions were noted, they were typical of values seen in such systems, however the increasing trend in pH suggests changing conditions in this stream. A high concentration of zinc was measured in 1994, and P,P'DDE (a metabolite of DDT) was detected in the 1995, 1996, and 1997 sediment samples. Although the use of DDT was banned in 1973, it is very persistent in the environment. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentrations suggest improving conditions for these parameters. Recreational uses are partially supported due to fecal coliform bacteria excursions, compounded by a significant increasing trend in fecal coliform bacteria concentration. Aquatic life and recreational uses are fully supported at the downstream site (E-104), which is also a blackwater system.

A fish consumption advisory has been issued by the Department for mercury and includes the streams within this watershed (see advisory p.31).

Permitted Activities

Point Source Contributions

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT</i>	<i>NPDES# TYPE LIMITATION</i>
NORTH FORK EDISTO RIVER TOWN OF NORTH PIPE #:002 FLOW: 0.2/0.3	SC0047821 MINOR MUNICIPAL EFFLUENT
NORTH FORK EDISTO RIVER TOWN OF NORTH PIPE #:001 FLOW: M/R SPRAYFIELD	SC0047821 MINOR MUNICIPAL EFFLUENT
<i>LAND APPLICATION FACILITY NAME</i>	<i>PERMIT # TYPE</i>
SPRAY IRRIGATION PELION ELEM. SCHOOL	ND0013561 COMMUNITY
SEPTAGE INJECTION CE TAYLOR PUMPING, INC.	ND0070149 INDUSTRIAL
SPRAYFIELD TOWN OF PELION	ND0013561 DOMESTIC

Growth Potential

There is a low potential for growth in this watershed. There is a small industrial park north of the Town of Pelion that may attract future industrial prospects, but there is currently no industry in the watershed. S.C. Highway 302 and a rail line pass through the area.